between CLECs based on the facilities they owned;[73] and (iii) Section 252(i), which applies the nondiscrimination obligation by requiring an incumbent LEC to make available "any . . . network element" provided under an interconnection agreement with one CLEC "to any other requesting telecommunications carrier upon the same terms and conditions."[74]

Second, it has likewise been suggested that the Commission's rules might make distinctions based upon the type of customer the CLEC sought to serve – providing, for example, that a network element might be required to be unbundled insofar as a CLEC sought to serve a residential customer but not if it sought to serve a large business customer. This would likewise violate the Act, for Section 251(c)(3) provides that network elements must be made available "to any requesting telecommunications carrier for the provision of a telecommunications service," and does not permit the Commission to provide that some types of services – such as those offered to some business customers – may not be provided through the same UNEs. In all events, any such rule would require lines to be drawn that would be arbitrary when applied and subject to incessant disputes and litigation over their scope.[75]

B. The Act Does Not Codify The "Essential Facilities" Doctrine.

Incumbent LECs have also asserted that Section 251(d)(2) of the Act codifies the "essential facilities" doctrine developed by lower courts under the antitrust laws.[76] That claim is

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[73] *See Iowa Utils. Bd.*, 119 S. Ct. at 736.

[74] *See id.* at 738.

[75] For example, many businesses have small individual locations that generate less traffic than many residences. Any presumption about the relative costs of serving business and residences would be provably wrong in numerous specific instances.

[76] *See Notice* ¶ 22.

baseless. The "essential facilities" doctrine has been applied only in extreme cases of anticompetitive conduct and assumes the continuation of a monopoly in the defendant's core market – the very circumstance Section 251 seeks to end. Reliance on the essential facilities doctrine to determine when network elements should be unbundled would thus be contrary to the Act's clear language and antithetical to its purposes.

To begin with, and contrary to the claims of the incumbent LECs, the Supreme Court plainly did not decide that Section 251(d)(2) adopts the essential facilities doctrine. Quite the contrary, the Supreme Court held only that Section 251(d)(2) required the Commission to apply "*some* limiting standard" in determining what unbundled network elements must be made available under Section 251(c)(3), and specifically declined to adopt the incumbent LECs' "essential facilities" argument.[77]

The incumbent LECs therefore largely ignore the Court's opinion on this issue, and rely instead on Justice Breyer's partial dissent and partial concurrence. That reliance is severely misplaced for at least two reasons. First, no other Justice joined Justice Breyer, and it is elementary that a Justice writes a separate opinion precisely because he or she wishes to express a view that the majority opinion has *not* adopted. Second, even Justice Breyer (apparently conflating the "necessary" and "impair" factors rather than considering them separately) stated only that, in his view, Section 251(d)(2) requires that the Commission give a "convincing explanation" of why unbundling should take place in those instances "where a new entrant could

[77] *See Iowa Utils. Bd.*, 119 S. Ct. at 734 ("[w]e need not decide" whether "the 1996 Act requires the FCC to apply that standard"). Indeed, the Supreme Court has never adopted the essential facilities doctrine even in the antitrust context. *See id.* at 753 (Breyer, J., concurring in part and dissenting in part).

compete effectively without the facility, or where practical alternatives to that facility are available."[78]

Nor is there any statutory support for the incumbent LECs' position. The Act does not refer to "essential facilities," use the word "essential," or otherwise employ any other term used by the courts in describing the essential facilities doctrine. There likewise are no such references in the legislative history. And under the natural meaning of the terms, the "impair" standard of Section 251(d)(2) bears no relation to the "essential" standard of the essential facilities doctrine. "Impair" means simply "to diminish in quantity, value, excellence, or strength" (*see supra* pp. 28-29), and does not remotely connote the indispensability of an "essential" facility. By contrast, as the Ninth Circuit has pointed out, the essential facilities doctrine requires "more than merely impos[ing] some handicap on potential competitors"; it requires that "all possibility of competition in the downstream market" be "eliminated."[79]

It would likewise be inappropriate to rely upon the essential facilities doctrine in considering the "necessary" standard that is reserved for proprietary elements. The Supreme Court has rejected the argument that the term "necessary" should be construed to mean "essential," holding that such an "argument would give an unwarranted rigidity to the application of the word 'necessary,' which has always been recognized as a word to be harmonized with its

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[78] *See id.* Justice Breyer's proposed standard is "related" to the essential facilities doctrine, see *id.*, in the sense that both involve an assessment of substitutability, but Justice Breyer's standard would require unbundling in many more instances – because Justice Breyer would require unbundling whenever a new entrant could otherwise not compete "effectively," where alternatives are not "practical[ly]" available, or where the Commission advances another "convincing explanation" for requiring unbundling.

[79] *See Alaska Airlines, Inc.* v. *United Airlines, Inc.*, 948 F.2d 536, 543 (9th Cir. 1991); *see also id.* at 543 (essential facilities doctrine applies only where "refusal eliminated competition, rather than merely impeding it").

context."[80] In this instance, in order to apply "necessary" consistent with its context, the Commission must construe it in a manner that is "rationally related to the goals of the Act"[81] – *i.e.*, the Commission must consider what is "necessary" to achieve Congress' objective of the full and prompt opening of local markets.[82] Because that objective is dramatically different from, and more aggressive than, the objective of the antitrust laws upon which the essential facilities doctrine is based, the Commission's implementation of the "necessary" standard of Section 251(d)(2)(A) cannot be limited or defined by antitrust law standards.

The antitrust laws prohibit only particular types of misconduct, such as restraints of trade and the willful acquisition or maintenance of monopoly power. Thus, Section 2 of the Sherman Act prohibits only the act of "monopoliz[ing]" (15 U.S.C. § 2) – that is, the misuse of monopoly power to acquire, perpetuate, or extend a monopoly.[83] The Sherman Act does not prohibit the possession of a monopoly *per se* or impose any general duty on a monopolist to open its monopoly to competitors.[84] So long as the monopoly was not unlawfully acquired or misused, the antitrust laws provide no aid to would-be competitors and impose no duties on monopolists

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[80] *See Armour & Co.* v. *Wantock*, 323 U.S. 126, 129-130 (1944) (citing *McCulloch* v. *Maryland*, 17 U.S. (4 Wheat.) 316, 413, 414 (1819)).

[81] *Iowa Utils. Bd.*, 119 S. Ct. at 734.

[82] *See, e.g., First Report and Order* ¶¶ 1, 3-4, 11-12.

[83] *See, e.g., Illinois ex rel. Burris* v. *Panhandle Eastern Pipe Line Co.*, 935 F.2d 1469, 1481 (7th Cir. 1991) ("The offense of monopolization requires proof of 'conduct designed to maintain or enhance monopoly power improperly'") (emphasis in original).

[84] *See, e.g., United States* v. *United States Steel Corp.*, 251 U.S. 417, 451 (1920) (Section 2 of the Sherman Act "does not make mere size an offense, or the existence of unexerted power an offense. It . . . requires overt acts, and trusts to its prohibition of them and its power to repress or punish them. It does not compel competition").

to assist them.[85] Thus, "[m]onopolists needn't acquiesce to every demand placed upon them by competitors or customers; a monopolist's duties are negative – to refrain from anticompetitive conduct – rather than affirmative – to promote competition."[86] And consistent with the very limited obligation imposed on monopolists by the antitrust laws, the essential facilities doctrine has been narrowly construed, and only very rarely applied, by the courts. The doctrine has been applied only in "extreme" cases,[87] such as where access previously provided to an essential facility was arbitrarily withdrawn by a monopolist for the sole purpose of destroying or foreclosing competition.[88]

In sharp contrast to Section 2 of the Sherman Act, Congress adopted an affirmative and pro-active approach in Section 251, including the obligation to provide nondiscriminatory access to network elements on an unbundled basis, for the specific purpose of actively facilitating competitive entry and opening up existing local exchange monopolies to competition. The purpose of Section 251 is to eliminate local exchange monopolies that were *not* declared unlawful under the antitrust laws, and that were *not* held to be required under the essential facilities doctrine (or any other antitrust doctrine) to provide their potential local competitors with access to their facilities.

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[85] *See, e.g., Olympia Equipment Leasing Co.* v. *Western Union Telegraph Co.*, 797 F.2d 370, 375 (7th Cir. 1986) ("Today it is clear that a firm with lawful monopoly power has no general duty to help its competitors"); *Aspen Skiing Co.* v. *Aspen Highlands Skiing Corp.*, 472 U.S. 585, 600 (1985) ("a firm possessing monopoly power has no duty to cooperate with its business rivals").

[86] *See Illinois ex rel. Burris* v. *Panhandle Eastern Pipe Line Co.*, 935 F.2d at 1484.

[87] *See Alaska Airlines, Inc.* v. *United Airlines, Inc.*, 948 F.2d at 543.

[88] *See, e.g., Aspen Highlands Skiing Corp.* v. *Aspen Skiing Co.*, 738 F.2d 1509, 1520-21 (10th Cir. 1984) (joint ticket withdrawn by defendant solely for the purpose of eliminating a competitor), *aff'd on other grounds*, 472 U.S. 585 (1985).

Indeed, the inapplicability of the "essential facilities" doctrine under Section 251 is starkly illustrated by the fact that no "essential facilities" claim can be made whenever a facility can be duplicated.[89] The doctrine therefore has no application whatsoever to any situation in which consumers face the supracompetitive prices of a duopoly. But Section 251 was designed to do more than convert monopolies into duopolies, for it seeks to create broad and robust competition from multiple new entrants that will drive prices to cost.

Moreover, unlike Section 251, the essential facilities doctrine has never been used to require a monopolist to provide access to an essential facility simply to permit others to compete in the same market. The essential facilities doctrine comes into play only where a monopolist's control of an essential facility has been misused to leverage monopoly power from the monopolized market to foreclose competition in another *adjacent* market, thereby "extend[ing] monopoly power from one stage of production to another, and from one market into another."[90]

Because of its very limited application, the essential facilities doctrine cannot be used to pry open regulated monopolies to competition. Instead, that objective is the traditional province of agency-adopted regulation that is triggered by different standards than court-ordered injunctions. Agencies adopting such rules do not face the same problems that require courts to limit the essential facilities doctrine solely to extreme instances of nondiscriminatory conduct.[91]

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[89] *See* 3A P. Areeda and H. Hovenkamp, Antitrust Law ¶ 773 p. 199 (1996).

[90] *See City of Anaheim* v. *Southern California Edison Co.*, 955 F.2d 1373, 1379 (9th Cir. 1992) (quoting *MCI Communications Corp.* v. *AT&T*, 708 F.2d 1081, 1132 (7th Cir. 1983)); *see also* 3A P. Areeda & H. Hovenkamp, Antitrust Law, p. 174 ("actionable essential facilities claims always (or virtually always) involve vertical integration").

[91] For example, in *City of Anaheim* v. *Southern California Edison Co.*, 955 F.2d 1373, 1380-81 (9th Cir. 1992), the court rejected a claim by two cities operating their own retail electric distribution systems that Edison's refusal to provide access to certain interstate high-voltage electric transmission lines constituted a denial of access to an essential facility. Four years later, (continued . . .)

In particular, because a nondiscriminatory access mandate generally requires continuing regulation of the terms and conditions on which the monopolist provides access to competitors – a task "for which both the federal courts and the antitrust litigation process are extremely ill-suited"[92] – antitrust courts have been extremely reluctant to apply the essential facilities doctrine to single-firm monopolists except in the face of the most flagrant anticompetitive behavior. These problems of administering the remedy in essential facilities cases are not presented by the agency, which administers such regulation as a matter of course and can modify its regulations over time to adapt to changed circumstances.

In short, importing the essential facilities doctrine into Section 251 would be insupportable as a matter of law and contrary to the statute's text, and would defeat its purposes. Congress did not enact the Telecommunications Act in order to reiterate that the LECs may maintain their monopolies so long as they refrain from violating the antitrust laws.

C. Other Incumbent LEC Claims

1. "Proprietary Elements." Some incumbent LECs are now suggesting, albeit vaguely, that numerous network elements are "proprietary," and therefore that the Commission must consider the "necessary" standard of Section 251(d)(2)(A) in deciding whether they should be unbundled. In the *First Report and Order*, however, the Commission examined each of the

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(. . . continued)
the Federal Energy Regulatory Commission issued FERC Order No. 888 in which it established rules designed to open the wholesale electric power market to competition by, among other things, requiring transmission companies to provide unbundled, nondiscriminatory transmission access at the request of distributors and, if necessary, to expand or upgrade their systems to serve the expanded load. The FERC thereby mandated access to transmission facilities under its rules which went far beyond what was required under the essential facilities doctrine as applied by the antitrust courts.

[92] *See* 3A P. Areeda & H. Hovenkamp, Antitrust Law, p. 175 (1996).

seven network elements and found very few proprietary concerns with respect to any of them.[93] No LEC appealed any of those determinations, and nothing in *Iowa Utils. Bd.* remotely called them into question. There is thus no reason to revisit that issue. Any reversal of the Commission's prior conclusions would require substantial explanation in order to survive judicial review,[94] and, in all events, any belated claims by LECs that certain of these same elements should now be viewed as proprietary should be viewed with great skepticism.

For example, Ameritech claims in its *ex parte* that the routing tables in its switches are proprietary.[95] Ameritech literally offers no explanation for that claim – except to state that "Ameritech considers its routing tables to be proprietary and maintains them as such"[96] – and it is baseless. The Commission properly described proprietary elements in the *First Report and Order* as "elements with proprietary protocols or elements containing proprietary information."[97] It further held that, with respect to proprietary information, the issue is whether the "proprietary

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[93] Specifically, the Commission found no proprietary concerns with respect to the loop (*First Report and Order* ¶ 388), the network interface device (*id.* ¶ 393), tandem switching (*id.* ¶ 425), transport (*id.* ¶ 446), signaling protocols for SS7 networks (*id.* ¶ 481), call-related databases (*id.* ¶ 490), and operator services and directory assistance (*id.* ¶ 539). It found some proprietary concerns with respect to the service creation environment and the service management system, and resolved those (*id.* ¶ 497). With respect to switching, the Commission noted, but did not at that time resolve, claims by incumbent LECs that some switching software was licensed to them on a proprietary basis. *See id.* ¶ 419. The proper treatment of such licenses under Section 251(c)(3) is presently the subject of another pending Commission proceeding and has no bearing on Section 251(d)(2). *See infra* pp. 54-55.

[94] *See Greater Boston Television Corp.* v. *FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970) (an agency may not "gloss[] over or swerve[] from prior precedents without discussion").

[95] *See* February 18, 1999 Ex Parte Letter by Lynn S. Starr (Ameritech), p. 9.

[96] *See id.*

[97] *See First Report and Order* ¶ 282.

information . . . will be *revealed* if the network element is provided on an unbundled basis."[98] Thus, if access to a network element is mediated so that it does not provide access to the proprietary information, the mere presence of that information provides no basis for deeming an element "proprietary."[99] With respect to routing tables, access to the switch provides CLECs with absolutely no access either to the information about customer usage and traffic patterns that Ameritech has gathered nor to the algorithms and other processes by which Ameritech uses that information to perform routing functions.

Further, information that incumbent LECs possess simply by virtue of their historic monopoly cannot be proprietary to them under the Act, because the central purpose of Section 251 is to eliminate that protected monopoly status and share those monopoly assets with new entrants. Ameritech's routing tables do not reflect any unique or proprietary innovation by Ameritech, but merely use the information about traffic patterns and volumes that Ameritech has obtained through years of franchised monopoly status to efficiently engineer the switching and routing within its network. They are among the quintessential monopoly assets that must be shared.

The *Notice* also asks (¶ 15) whether the term "proprietary" could refer to elements that are claimed to be proprietary to third-party vendors rather than to the LEC. The answer is no. The proper treatment of incumbent LECs' claims that the intellectual property rights of third parties require or permit them to prevent CLECs from receiving the same access to their network elements as the incumbent LECs themselves receive are fully addressed in AT&T's Comments in the separate and longstanding Commission proceeding devoted to this issue. Those comments

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[98] *See* 47 C.F.R. § 51.317(b)(1)(i) (emphasis added).

[99] *See Notice* ¶ 15.

demonstrate that incumbent LECs are under a statutory obligation to obtain whatever modifications to their licenses with third parties are necessary in order to enable them to provide nondiscriminatory access to their networks.[100] And once that obligation is met, there can be no conceivable claims that the network element in question is proprietary vis-a-vis the CLEC. Thus, while this issue has enormous competitive significance, it has no bearing on the application of Section 251(d)(2). It should therefore be resolved in CCBPol 97-4 as soon as possible.

Finally, even if some elements were deemed proprietary, that would not have the near-preclusive effect on their availability that the incumbent LECs appear to believe. The Supreme Court did not differentiate between the "necessary" and "impair" standards in discussing the errors of the Commission's prior approach, but indicated that the modifications the Commission needs to make – to consider alternatives outside the LECs' networks, and to determine whether the disadvantages that would flow from denying access to the LEC facilities could be service-affecting – apply to both.[101] The Commission therefore needs to consider the same set of issues in examining both necessity and impairment, and the difference ultimately is one of degree.

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[100] *See* Comments of AT&T Corp., Petition of MCI for Declaratory Ruling, CC Docket No. 96-98, CCBPol 97-4 (filed April 15, 1997). As those comments explain, Section 251(c)(3) imposes on incumbent LECs the obligation to provide "nondiscriminatory" access to network elements – i.e., access at least equal in quality to the access obtained by the incumbent LEC (see *First Report and Order* ¶ 312). It would be the essence of unlawful discrimination for an incumbent LEC to procure or accept contract language in its licensing agreements that permits it to use its network elements in certain ways while denying to CLECs access to those same functionalities. *see also* Report and Order, Implementation of Infrastructure Sharing Provisions in the Telecommunications Act of 1996, 12 FCC Rcd. 5470 ¶ 69 (1997) (requiring incumbent LECs to "seek" and to "obtain" license amendments from third-party vendors where necessary to comply with their statutory obligations).

[101] *See Iowa Utils. Bd.*, 119 S. Ct. at 734-736.

Thus, the Commission properly held in the *First Report and Order* that access to a network element is "necessary" when, without such access, CLECs' "ability to compete would be *significantly* impaired. . . ."[102] The Commission specifically rejected the suggestion that a "heavy burden of need" would be necessary to justify access to proprietary elements.[103] As the Commission explained, "[w]e acknowledge that prohibiting incumbents from refusing access to proprietary elements could reduce their incentives to offer innovative services. We are not persuaded, however, that this is a sufficient reason to prohibit generally the unbundling of proprietary elements, because the threat to competition from any such prohibition would far exceed any costs to consumers resulting from reduced innovation by the incumbent LEC. Moreover, the procompetitive effects of our conclusion generally will stimulate innovation in the market, offsetting any hypothetical reduction in innovation by the incumbent LECs."[104]

2. The Relevance of Resale. The *Notice* (¶ 43) asks whether "the availability of resold services obtained from the incumbent LEC should be considered in determining whether a particular network element should be unbundled." This question raises a claim advanced by the incumbent LECs earlier in this docket, and the answer is plainly no. As the *Notice* observes, the Commission "explicitly rejected" that suggestion in the *First Report and Order*, where it held that adopting such an approach would enable incumbent LECs to "completely avoid Section 251(c)(3) unbundling obligations by offering unbundled elements to end users as retail services."[105] And intervening events have *confirmed* that holding in two separate ways.

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[102] *See First Report and Order* ¶ 282.

[103] *See id.*

[104] *See id.*

[105] *See Notice* ¶ 43 (citing *First Report and Order* ¶ 287).

First, the LECs challenged that holding on appeal, claiming that vertical features were services subject to resale and therefore need not be unbundled, and both the Eighth Circuit and the Supreme Court upheld the Commission. As the Eighth Circuit held:

> Simply because these capabilities can be labeled as "services" does not convince us that they were not intended to be unbundled as network elements. While subsection 251(c)(4) does provide for the resale of telecommunications services, it does not establish resale as the exclusive means through which a competing carrier may gain access to such services. We agree with the FCC that such an interpretation would allow the incumbent LECs to evade a substantial portion of their unbundling obligation under subsection 251(c)(3).[106]

Second, there is now widespread recognition that resale is not a viable means of providing service, and it has been abandoned for that reason by AT&T, MCI, and others, and rejected even by the incumbents. USN, which had once been regarded as the "poster child" for demonstrating the viability of resale, has since declared bankruptcy.[107] And even the LECs now concede that resale is not viable.[108] Thus, the presence of resale can hardly render any UNE unnecessary, or mean that if CLECs are denied access to UNEs they will be unimpaired.

3. Sunsetting. Finally, the *Notice* (¶¶ 11, 36-40) asks whether it should provide, as some incumbent LECs have suggested, a sunset date for UNEs, or otherwise adopt a mechanism

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[106] *See Iowa Utilities Board* v. *FCC*, 120 F.3d 753, 809 (8th Cir. 1998); *see also Southwestern Bell Tel. Co.* v. *FCC*, 153 F.3d 597, 603 (8th Cir. 1998). The Supreme Court affirmed this aspect of the Eighth Circuit's decision. *Iowa Utils. Bd.*, 119 S. Ct. at 734.

[107] *See* Joel I. Klein, Testimony Before the Subcommittee on Antitrust, Business Rights and Commerce of the Senate Judiciary Committee, "The State of Competition in the Telecommunications Marketplace Three Years After the Enactment of the Telecommunications Act of 1996," at 4 (Feb. 25, 1999).

[108] For example, GTE proclaimed that its "experience . . . has proven that resale margins alone . . . are not large enough to support" GTE's entry as a CLEC into other incumbent LECs' markets. *See* Decl. of J. Kissel, GTE, at 2-4, GTE-Bell Atlantic Merger, CC Docket 98-184. Bell Atlantic agrees. *See id.* Bell Atlantic Pub. Int. Statement at 31 ("the economics of entry" via resale "have proven too unfavorable to expect substantial entry on a large scale by any competitor in the near term").

by which UNEs can be removed from the new Rule 319 that the Commission will adopt.[109] The Commission should always be prepared to "review and amend the rules it adopts . . . to take into account competitive developments, states' experiences, and technological changes,"[110] and if UNE rules succeed in fostering competitive local markets, they will ultimately lay the predicate for their own elimination.[111] Indeed, the Commission adopted an entirely reasonable approach in the *Shared Transport Order* in this docket, when it observed that the need for CLECs to access shared transport, for example, "may decrease" as CLECs "expand their customer base," and that it could "evaluate at that time" whether the Section 251(d)(2) factors "continue" to weigh in favor of unbundling shared transport.[112]

By contrast, a "sunset" date fixed in advance would have severely adverse effects on the development of competitive markets, for it would encourage the incumbent LECs to withhold and slow-roll access to UNEs in anticipation of the obligation being eliminated. The reality is that the Commission would have no way at this time of knowing whether market conditions would actually support elimination of the unbundling requirement for a particular UNE at the sunset date, and no way of knowing whether Section 251 would otherwise be "fully implemented" by that date. Accordingly, any sunset would be subject to challenge not only as

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[109] *See, e.g.*, March 1, 1999 Ex Parte Letter by William P. Barr (GTE).

[110] *See First Report and Order* ¶ 24.

[111] *See First Report and Order* ¶ 6 (regulatory requirements should be "lifted as soon as competition eliminates the need for them").

[112] *See* Third Order On Reconsideration and Further Notice of Proposed Rulemaking, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, 12 FCC Rcd 12460, 12481, ¶ 35 & n.95 (Aug. 18, 1997) ("*Shared Transport Order*").

inherently arbitrary but also as a violation of the statutory prohibition against premature "forbearance" from Section 251.[113]

IV. AS IT DID IN THE FIRST REPORT AND ORDER, THE COMMISSION SHOULD IDENTIFY A MINIMUM LIST OF SEVEN NETWORK ELEMENTS THAT INCUMBENT LECS MUST UNBUNDLE.

The Commission should reaffirm in this proceeding that the seven network elements identified in the *First Report and Order* must continue to be unbundled on a national basis. Such a conclusion is strongly supported by the factors the Commission is required to consider under Section 251(d)(2) and by other considerations rooted in the Act's purposes, and would advance the Act's objective of rapidly fostering widespread local competition. Without each of these unbundled network elements, CLECs would not be able to provide competitive service as broadly, as effectively, or as quickly as they otherwise would, and consumers would face fewer choices and higher prices.

A. Local Loops (Including Advanced Services).

Local loops are the quintessential bottleneck network elements. The loop is widely considered to have the "strongest bottleneck characteristics of any network element" and to present the "most formidable entry barrier to the local exchange market[.]"[114] As Chairman Kennard recently stated:

> The copper wire that goes from the central office to your home or business is not just the last mile. It's the most important mile. It's the route into the marketplace for competitors and to the Internet for consumers. It's got to be at the head of any list of unbundled network elements.

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[113] *See Notice* ¶ 40 (citing Section 10(d)).

[114] *First Report and Order* ¶ 368.

> It's critical for making local phone competition a widespread reality. It's critical to keeping what is a key part of the Internet open and competitive. And it's critical to keeping us on track to the world of competition.[115]

The *Notice* thus tentatively concludes (¶ 32) that the loop should be required to be made available as an unbundled network element.

Virtually no carrier – entrant or incumbent – has disputed seriously the need to require access to unbundled local loops. In fact, during the *Local Competition* proceeding, there was near unanimous support for the unbundling of local loops, including support from the incumbent LECs and state commissions, and there has been no disagreement regarding its technical feasibility.[116] Congress likewise had unbundled loops in mind when it drafted the 1996 Act. The Joint Explanatory Statement (at 116) includes the local loop as an example of an unbundled network element,[117] and Section 271's competitive checklist requires BOCs to provide unbundled local loops as a precondition for interLATA entry.[118] Access to unbundled local loops is thus consistent with Congressional intent and the expectations of all industry participants.

Incumbent LECs' local loops currently encompass more than 117 million residential and 56 million business access lines,[119] many of which permit incumbent LECs to provide their

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[115] Remarks by Chairman William E. Kennard before Legg Mason, "A Stable Market, A Dynamic Internet" (March 11, 1999).

[116] *First Report and Order* ¶ 368.

[117] *See* Joint Managers' Statement, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 113 (1996) ("Joint Explanatory Statement").

[118] *See* 47 U.S.C. § 271(c)(2)(B)(iv).

[119] *See* 1998 Annual Telcodata, Business Planning, Inc., 1997 numbers.

customers with high speed data services at rates up to 8 Mbps.[120] With the advent of cable modem competition – and despite incumbent LEC protestations that unbundling requirements discourage them from deploying advanced data service technologies – incumbent LECs are accelerating their plans to widely deploying ADSL technology in their networks.[121] Hence, industry observers predict that "the local loop [will remain] the dominant access method"[122] despite the emergence of cable modem and telephony technologies.

As AT&T demonstrates below, the unavailability of unbundled local loops unquestionably would impair the ability of CLECs to enter local markets.[123] CLEC self-

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[120] *See* ADSL Forum, "http://www.adsl.com/adsl_forum.html," "Technical Frequently Asked Questions" (September 1998).

[121] *See, e.g.*, Merrill Lynch, "Highlights from the Annual Global Telecom Conference" (March 18, 1999) ("Bell Atlantic's ADSL deployment strategy of 805 central offices covering 33 million access lines by '00 also translates to a big new product opportunity"); *id.* ("GTE is pushing into ADSL with 350 current central office deployments going to 550 by the end of the year. Those 550 COs will cover 10.1M access lines of which 60%, or 6M lines will qualify for ADSL service"); *PR Newswire*, "SBC: Leader of the Bandwidth; California Offering Marks Biggets ADSL Rollout in Any State" (January 12, 1999) ("SBC is undertaking the country's largest rollout of Asymmetrical Digital Subscriber Line (ASDL) technology, provisioning equipment in 526 central offices and bringing the service to 8.2 million residential customers and 1.3 million businesses by the end of [1999]"); Press Release, "BellSouth Announces Aggressive 30 Market Roll-Out Of Ultra-High Speed Bellsouth.Net Fastaccess ADSL Internet Service," "http://www.bellsouthcorp.com/proactive/documents/render/ 21462.html" (May 19, 1998) ("Super-charged 'always on' service will make higher speed, better priced ADSL Internet access available to 1.7 million home and small business users in 1998"). *See also* "http://www.interprise.com/dsl/promo.html" (describing U S WEST's recent DSL promotion that includes a free high speed modem for customers in Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington, Wyoming and Utah); "http://www.ameritech.com/products/homeadsl/ava_order.html" (describing Ameritech's SpeedPath ADSL service available in parts of Michigan and Illinois).

[122] *See, e.g.*, *Telecommunications*, p. 12 (March 1999).

[123] As a threshold matter, the Commission already has found that local loop elements are not proprietary. *First Report and Order* ¶ 388. There have been no changes in loop facilities since the Commission promulgated the *First Report and Order* that would warrant any alteration of that conclusion.

provision of local loops would be financially prohibitive and enormously protracted. Similarly, there are not today any practical alternative facilities – including mobile wireless, fixed wireless, or cable – that can reach the majority of consumers currently served over incumbent LECs' local loops with a comparable quality of service or at similar costs.

1. Entry Into Local Telecommunications Markets Through Widespread Self-Provision Of Local Loops Is Not Feasible.

In evaluating the importance of requiring access to unbundled local loops, the Commission should focus on mass-market entry.[124] Congress intended the Telecommunications Act to foster rapid, widespread local competition that benefits all consumers. Meaningful competition, then, is synonymous with a CLEC's ability quickly to initiate service for all consumers in a geographic area. A mass-market campaign cannot succeed, however, if the CLEC must build the facilities necessary to serve a customer *after* the customer has requested a change in its local service provider. Hence, a CLEC must either build facilities to virtually all customers in a given area before offering service or it must have unbundled access to the incumbent LEC's facilities instead.

The BOCs alone have well over 135 million local loops,[125] a number that continues to grow.[126] And in the *First Report and Order*, the Commission found that "local loop plant

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[124] Subcommittee on Antitrust, Business Rights, and Competition, Senate Judiciary Committee, Statement by Joel I. Klein, Assistant Attorney General, "The State of Competition in the Telecommunications Marketplace Three Years After Enactment of the Telecommunications Act of 1996" at p. 4 (Feb. 25, 1999), http://www.senate.gov/~judiciary/jk22599.html (the purpose of the Telecommunications Act of 1996 is to "bring[] the range of competitive benefits to mass-market consumers").

[125] *Source*: *Telephony*, p. 20-24, January 4, 1999, http://www.internettelephony.com. Ameritech (21,210,310 lines excluding high capacity lines and lines in Indiana); Bell Atlantic (39,921,000 switched access lines); BellSouth (23,869,000 lines); SBC (34,069,732 switched access lines); U S WEST (16,242,176 switched access lines).

comprise[d] approximately $109 billion of total plant in service, which represent[ed] 41 percent of total plant in service and 48 percent of network plant[.]"[127]

In addition, unlike the incumbent LECs who build outside plant to serve existing customers that immediately begin paying for those facilities, "without access to unbundled loops, new entrants would be required to make a large initial sunk investment in loop facilities before they had a customer base large enough to justify such an expenditure. This would increase the risk of entry and raise the new entrant's cost of capital."[128] In other words, CLECs would face an inflated cost of capital as well as tremendously "high cost[s] per loop" while they attempt to win customers, and their insurmountable cost disadvantage relative to the incumbent LECs would "have the effect of prohibiting" them from providing service.[129]

Further, self-provision of local loops is not only prohibitively expensive, it is very slow. The process usually requires 4-6 months of negotiations with the local municipality to secure the

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(. . . continued)

[126] *See, e.g.*, SBC Communications Inc. 1998 Annual Report, p. 2 (SBC experienced a 4.1 percent increase in residential access lines and a 15.6 percent increase in business access lines).

[127] *First Report and Order* ¶ 378n. 818 (*citing* 1995 ARMIS Report 43-04).

[128] *First Report and Order* ¶ 378 (footnote omitted); *see also* "Competing for Their Share of the $100 Billion Local Telephone Market...Finally," *Equity Research Industry Report*, George K. Baum & Company, p.14 (June 30,1997) ("If CLECs had to build loop facilities to connect all customers, the initial capital required to build the loops would be significant and prohibitive").

[129] *See Texas Build-Out Preemption Order*, 13 FCC Rcd. at 3498.

necessary authorization to use rights of way. Moreover, in some instances, this negotiation process can take years to complete.[130]

In addition, the CLEC also must gain access from the incumbent LEC (or other utility) to their rights-of-way where the loops are to be deployed, a process that may generate further significant delay if the CLEC has to resort to the Commission's formal dispute resolution process, a possibility that is increasingly likely.[131] Historically, access to rights-of-way has involved the attachment of wireline equipment to poles, ducts, or conduit.[132] Now that the Act has made it possible for CLECs to deploy their own local facilities, the demand for access to rights-of-way not involving poles, ducts, and conduits, as well as the use of wireless technology, will increase dramatically. In light of the fact that incumbent LEC facilities are not necessarily optimally deployed from the perspective of the customers' locations and forward looking technology, CLECs are likely to need to locate facilities where telecommunications carriers and utilities have not laid conduit or installed poles.[133]

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[130] *See, e.g.*, Affidavit of William S. Beans, Jr., Meredith R. Harris, and M. Joseph Stith ("Beans/Harris/Stith Aff.") at ¶ 6 (discussing similar delays in the context of dedicated transport self-provision).

[131] If the rights-of-way do not exist, then the CLEC must obtain them, a process that could prove extraordinarily lengthy even if the incumbent LEC exercises its eminent domain powers on behalf of the CLEC.

[132] *See* Report and Order, *Implementation of Section 703(e) of the Telecommunications Act, Amendment of the Commission's Rules and Policies Governing Pole Attachments*, 13 FCC Rcd. 6777 (1998) ¶ 120 ("*Pole Attachment Order*").

[133] This fact is implicit in the Commission's conclusion that a scorched node cost estimation methodology would give CLECs an added incentive to deploy their own facilities. *See First Report and Order* ¶ 685.

At the same time, most cable operators, telecommunications carriers, and utilities agree "that there are too many different types of rights-of-way, with different kinds of restrictions placed on the various kinds of rights-of-way, to develop a methodology that would assist a utility and potential attacher in their efforts to arrive at just and reasonable compensation for the attachment."[134] These "restrictions may also vary by state and local laws of real property, eminent domain, utility, easements, and from underlying property owner to property owner."[135] Consequently, the Commission has decided to learn about and resolve the problems that arise in the context of access to rights-of-way not involving poles, ducts, or conduit on a case-by-case basis.[136] A formal case-by-case dispute resolution process, of course, will involve significant delay in deployment of CLECs' own outside plant facilities. In some instances, this also could delay the construction of some wire centers because the location of such centers often depends on access to, and the costs of, incumbent LEC and utility rights-of-way.

Even when poles, ducts, and conduits are involved, delay in obtaining access to rights-of-way will be commonplace as CLECs attempt to deploy new technologies with unique physical characteristics and configurations (*e.g.*, fixed wireless transmission equipment). While the

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[134] *Pole Attachment Order* ¶ 120.

[135] *Id.* ¶ 120.

[136] *Id.* ¶ 121.

Commission does have a complaint process to resolve disputes over access to rights-of-way, there is no deadline for completion of that process for any specific case.[137]

Even if a CLEC could afford the massive up-front investment required, these lengthy delays inherent in obtaining access to rights-of-way (including rights-of-way agreements) and then installing duplicative local loops would critically undermine the prospects for widespread competitive entry. CLECs would be delayed both in their initial entry efforts and in provisioning service to specific customers on a going-forward basis. Without question, a CLEC must be able to offer new services, modify existing services, or extend its service footprint to new customers in the same time frames that the incumbent LEC can do so or it cannot expect to win many customers. For that reason, a CLEC could be forced to choose between accepting onerous terms from the incumbent LEC (or utility) and losing potential customers to the incumbent LEC.

Hence, it is clear that lack of access to unbundled loops would impair CLECs' ability to compete. The substantial financial burden and delays that self-provision of local loops would impose on CLECs previously led the Commission to conclude that access to unbundled local loops "is critical to encouraging market entry."[138] That same conclusion is warranted today.

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[137] *Id.* ¶ 16. As CLECs attempt to deploy more and more of their own outside plant facilities, such as local loops, the Commission thus should expect that demands on its resources to resolve the inevitable disputes will increase dramatically.

[138] *First Report and Order* ¶¶ 377-78.

2. Alternative Facilities To The Local Loop Are Not Currently Available.

CLECs presently have no practical alternative to incumbent LEC loops and such alternatives, particularly for voice services, will not exist for years. Mobility cellular/PCS infrastructure, fixed wireless facilities, and cable telephony technology are the only near term possible means by which CLECs might hope to bypass incumbent LEC loops, but these technologies do not presently provide realistic alternatives. And despite the ability of certain technologies to serve as an alternative for data services, such as satellite-based broadband alternatives for high speed data applications, they may not be suitable alternatives for voice (for example, echo and delay may occur with satellites).

Mobility Cellular and PCS services. As the Commission recently found in its order denying BellSouth's Louisiana Section 271 application, cellular and PCS wireless services complement wireline services, they do not supplant them.[139] Current wireless penetration is estimated at 31 percent and is not projected to exceed 50 percent until 2004.[140] Wireless usage constitutes an even smaller proportion – 5.9 percent – of total 1998 network minutes of use and is not expected to top 12 percent until 2003.[141] Further, mobility cellular and PCS networks are not ubiquitous, leaving millions of customers outside of mobile wireless footprints. Reaching unserved segments of the population as well as installing the additional capacity necessary to

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[139] Memorandum Opinion and Order, *Application of BellSouth Corporation, et al. for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121, 1998 WL 712899 (F.C.C.) ¶¶ 31-43 (rel. Oct. 13, 1998).

[140] Donaldson, Lufkin & Jenrette, Table 4, The Wireless Communications Industry (Winter 1998/1999).

[141] Merrill Lynch, "The Next Generation III, Wireless in the US," p. 49 (March 10, 1999).

support the relatively higher traditional wireline call volumes in those regions already served will be slow and may present significant difficulties.[142]

The ability of mobility cellular and PCS services to compete with traditional wireline services is compromised by characteristics that limit consumer willingness to use them as their primary voice line. For example, unlike residential telephone service, a mobile wireless customer pays for incoming and outgoing calls. Without "calling party pays," according to Merrill Lynch, "[a] subscriber [is] less likely to leave the phone on and give out his/her number. And because the subscriber doesn't leave the phone on, it is primarily used as a one-way (outgoing) device which prevents it from becoming a true landline replacement."[143] Moreover, number portability for wireless services is many years away,[144] and E-911 interoperability difficulties may make these services appear inferior to wireline services from the perspective of

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[142] For example, while wireless attachments are entitled to the protections afforded by the Pole Attachment Act, their size and physical configuration often depart from traditional wireline attachments, making it more likely that CLECs will need to resort to the Commission's open-ended complaint process. *See Pole Attachment Order*, 13 FCC Rcd. 6777 ¶¶ 16, 39-42 (1998). In the past, wireless attachment differences have lead to tremendously excessive charges for wireless attachments. In New York, which has some of the highest pole attachment rates in the country, utilities typically charge cable systems approximately $10 per year per pole attachment. *See, e.g.*, Central Hudson Gas & Elec. Corp., Schedule P.S.C. No 14 – Electricity, 19th Revised leaf No. 22M (issued Apr. 14, 1997) (annual rate of $8.43 per equivalent pole); Consolidated Edison Co. of New York, Inc., Schedule P.S.C. No. 9 – Electricity, 3rd Revised leaf No. 139 (issued Apr. 15, 1996) (annual rental rate of $13.79 per pole attachment). By contrast, utilities in New York have charged wireless attachers $10,000 or more per year per pole attachment.

[143] Merrill Lynch, "The Next Generation III, Wireless in the US," pp. 2, 52-55 (March 10, 1999). *See also* Speech of Chairman William E. Kennard, CTIA Convention, "Crossing Into The Wireless Century" (Feb. 9, 1999) ("Only five percent of phone calls are now made on mobile phones. I think that number would increase dramatically with a calling party pays system").

[144] *See* Memorandum Opinion and Order, *Cellular Telecommunications Industry Association's Petition for Forbearance From Commercial Mobile Radio Service Number Portability Obligations*, WT Docket No. 98-229, and *Telephone Number Portability*, CC Docket No. 95-116 ¶ 1 1999 WL 58618 (F.C.C.).

many customers.[145] Nor can business and residential customers obtain the multiple telephone extensions around their premises to which they have become accustomed.

Finally, mobile wireless quality can be lower than that achievable on wireline facilities due to many factors, such as climate, that frequently lie outside the service provider's control.[146] Hence, Deutsche Bank Research has concluded that: "Instead of 'cutting the cord,' it is more likely that wireless handsets will play a large role as second or third lines that supplement the fixed network."[147]

Fixed wireless services. Fixed wireless services someday may address the high-speed data limitation on mobile wireless services, but they are not yet generally available. While Teligent and Winstar do provide fixed wireless services, and AT&T will begin rolling out a fixed wireless service of its own in select cities over the next few years, fixed wireless constitutes a miniscule portion of total traffic volumes in the United States and will not capture a meaningful market share any time in the foreseeable future.[148]

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[145] *See generally* Memorandum Opinion and Order, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, 12 FCC Rcd. 22665 (1997); Report and Order and Further Notice of Proposed Rulemaking, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, 11 FCC Rcd. 18676 (1996).

[146] Deutsche Bank Research, "Domestic Wireless Penetration Challenges," pp. 1, 2, 9 (February 1, 1999).

[147] *Id.* p. 1.

[148] *See PC Week*, p. 77 (Feb. 22, 1999) (According to AT&T CEO C. Michael Armstrong, "AT&T will conduct market trials of improved fixed wireless service this year. Commercial services are scheduled for 'selected city rollouts in 2000'"); *USA Today*, p. 1B (March 19, 1999) ("We will in 1999 take this to market test . . . several thousand paying customers. If we learn all we need to know . . . selective cities in 2000") (*quoting* AT&T CEO C. Michael Armstrong, from the Merrill Lynch Telecommunications CEO Conference).

Until recently, fixed wireless technology has been relatively expensive, estimated at approximately $1,150 per household. Improvements, however, have reduced the forecasted cost to $750 per household.[149] Yet despite these cost decreases, fixed wireless deployment will take years to complete. Indeed, AT&T expects that fixed wireless service activation in most communities will require at least two years from the time a decision is made to deploy that service in a particular area. Moreover, due to spectrum limitations and the inability of entrants accurately to forecast customer demand for this novel technology, traditional wireline services will be required as backup during a potentially lengthy transitional period.[150]

Even if fixed wireless services were broadly available, they may not support all services to which a customer currently subscribes. Fixed wireless technology will support up to four voice lines and a 128 to 256 Kbps Internet connection.[151] More lines and higher speed data services may require access to wireline services. These limitations will become more acute as residential and small business customers demand the higher speed services such as ADSL (up to 8 Mbps) that incumbent LECs already are offering over their wireline local loops.

Cable telephony. Currently, cable telephony's reach is limited primarily to residential consumers and then to only a subset of customers actually subscribing to cable service. Cable mergers may accelerate cable telephony deployment, but widespread availability of that technology is a few years away. Much of the cable infrastructure today supports one-way

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[149] *USA Today*, p. 1B (March 19, 1999).

[150] At peak times, the allocated spectrum may be insufficient to ensure continuous service to all customers and, consequently, traditional wireline service may be necessary as an overflow backup while fixed wireless service providers learn more about the demands for this new technology.

[151] *See generally PC Week*, p.73 (February 22, 1999).